UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/467,074	12/20/1999	Bas Ording	001580-504	1894

			EXAMINER
21839	7590	10/23/2003	BAUTISTA, XIOMARA L

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ART UNIT	PAPER NUMBER
2173	

DATE MAILED: 10/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary

Application No.	Applicant(s)
09/467,074	ORDING ET AL.
Examiner	**Art Unit**
X L Bautista	2173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>28 July 2003</u> .
2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-22,24-72 and 74-141* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) *109-117* is/are allowed.
6) ☒ Claim(s) *See Continuation Sheet* is/are rejected.
7) ☒ Claim(s) *6-8,29,30,33,34,39-41,65,66,69,70,75,77,78,101,102,105,106,124 and 125* is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
11) ☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.
    If approved, corrected drawings are required in reply to this Office action.
12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All b)☐ Some * c)☐ None of:
        1. ☐ Certified copies of the priority documents have been received.
        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.
14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
    a) ☐ The translation of the foreign language provisional application has been received.
15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>21</u> .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Continuation of Disposition of Claims: Claims rejected are 1-5,9-22,24-28,31,32,35-38,42-64,67,68,71,72,74,76,79-100,103,104,107,108,118-123 and 126-141.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments filed on 7/28/03 have been fully considered but they are not persuasive.

A.   In response to applicant's argument (page 32, lines 1-10; page 33, lines 4-26; page 34, lines 2-22; page 35, lines 1-17) that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both Selker and Carpendale teach selectable objects that are magnified when the cursor is proximate to them. Carpendale teaches magnification of the object (at a first level) that is closest to the cursor and repositioning (distortion) and magnification (at other level less than the first level) of other objects so that the object of interest can be easily viewed by the user (see Carpendale: page 50, column 1, lines 8-13). To further illustrate this point, Applicant's attention is directed to the articles "Extending Distortion Viewing from 2D to 3D" and "Designing the User Interface" cited previously.

B.   Applicant argues (page 36, lines 2-15) that "claim 128 says that the height

of one of the items is increased from the default height to a fixed maximum level

'upon detecting that the cursor is within said threshold distance.' The claims goes

on to recite the step of 'maintaining said height at said fixed level while said cursor

is equal to or less than said threshold distance from said one item.' The

explanation provided in the Office Action does not equate to the claim recitation.

To illustrate, if the threshold distance is equal to 8, the size of the menu icon does

not increase from the default height h to the maximum level. Rather, it only goes

from h to h+1. Thereafter, if the cursor is moved closer, the height of the icon is

not maintained at that level. Rather, it continuous to increase."

In response, Selker teaches that the height of an object is increased when

the cursor is proximate to it. The object starts with a default height h before

moving the cursor close to it. The size of the object increases, for instance, at a

height h+n when the cursor is detected to be close to the object at a specific

distance d (threshold distance), and the size of the object keeps increasing every

time the cursor gets closer to the object until it reaches a determined maximum

height (level); the size of the object is maintained after reaching the determined

maximum level so that the object does not continue to increase indefinitely (see

Selker: col. 4, lines 21-29, 51-58; col. 5, lines 19-67; col. 6, lines 1-17; col. 8,

lines 46-60; col. 9, lines 29-35, 49-52).

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically
> disclosed or described as set forth in section 102 of this title, if the
> differences between the subject matter sought to be patented and the prior
> art are such that the subject matter as a whole would have been obvious at
> the time the invention was made to a person having ordinary skill in the art
> to which said subject matter pertains. Patentability shall not be negatived by
> the manner in which the invention was made.

3.   **Claims 1-5, 9, 10, 12-15, 20, 21, 25-27, 35-38, 42-46, 48-51, 56, 57, 61-**

63, 71, 74, 76, 79-82, 84-87, 92, 93, 98, 99, 107, 118-123, and 127-141 are

rejected under 35 U.S.C. 103(a) as being unpatentable over *Selker* (US 5,736,974)

in view of *Carpendale et al* (Distortion Viewing Techniques for 3-Dimensional Data,

1996).

Claims 1, 35, 71, 107, 118, 136, and 139:

Selker discloses a method for improving visibility and selectability of icons.

Enhanced visibility of icons and other types of menu items is provided by increasing

size and or skew (animation) or both of one or more icons or menu items in a

generally inverse relation to proximity of a cursor image address to particular icons

or menu items (abstract; col. 4, lines 59-67; col. 9, lines 55-67; col. 10, lines 1-7).

Selker does not teach repositioning the other tiles along the bar to accommodate

the varied size of the one tile however, Carpendale discloses a method for

distortion viewing techniques for 3-dimensional data that applies magnification and

distortion. Carpendale teaches that the method allows magnification of a chosen

focus to display detail (page 48, col. 2, lines 13-28; figs. 6 & 16; page 50, col. 1,

lines 18-31). Carpendale teaches repositioning the neighbors (other tiles) to

accommodate the varied size of the focal object; the viewing access distortion

restores the visibility of the central focus (page, col. 2, lines 28-31; figs. 1, 2, 3, 5,

11, 12, 16, 17, & 18).

Claims 2, 3, 4, 36, and 37:

See claim 1. See Selker, col. 8, lines 26-34; figures 1-5; see Carpendale:

page 50, column 1, lines 8-13.

Claims 5, 38, 74, and 76:

See claim 1. Selker teaches that if icons E and P (fig. 5) are at arbitrary

locations on the screen 61, 62 and the cursor at another arbitrary location,

evaluation of d' and d'' would ordinarily be done in regard to both orthogonal

directions on the display by, for example, applying the well-known Pythagorean

theorem to the distances between the icon address and the cursor address in both

coordinate directions. Differences in d (distance) provide for different degrees of

expansion of respective icons (col. 5, lines 33-55; col. 6, lines 1-17, 40-47; col. 7,

lines 27-30, 36-44, 51-57).

Claims 9, 45, 81, 123, and 133:

See claim 1. Carpendale teaches the use of four different functions,

orthogonal, step, sine, and Gausian (page 47, col. 2, lines 5-10; page 50, col. 1,

lines 8-13).

Claims 10 and 82:

See claim 1. Selker does not teach the position of the icon menu (bar)

however, it would have been obvious to one having ordinary skill in the art at the

time the invention was made to position Selker's bar at the bottom of the display

because the user can easily access and manipulate the icons.

Claims 12, 48, and 84:

See claim 1. Selker teaches that a value is assigned to an attribute data

representing a visual feature, the assigned value being from a group of at least

three different values. The menu items are displayed in accordance with the

assigned attribute data value (col. 9, lines 29-35, 63-67; col. 10, lines 1-7).

Claims 13, 49, and 85:

Selker teaches that the size of the menu item is limited in response to

detection of the cursor location within the detection zone of the menu item (col. 8,

lines 55-60; col. 9, lines 29-36; col. 10, lines 21-23).

Claim 14, 44, 50, 80, and 86:

Selker teaches that the user can enlarge the icon at will and also shrink the

icon by moving the cursor toward the normal position of the icon in the unexpanded (default) icon menu (col. 6, lines 60-67; col. 7, lines 1-26).

Claims 15, 51, and 87:

Selker teaches that an icon can be expanded to an arbitrary size (col. 5, lines 34-55; col. 6, lines 1-17, 40-47; col. 7, lines 36-44).

Claims 20, 56, and 92:

See claim 1. See Selker, figures 1-5.

Claims 21, 57, and 93:

See claim 1. See Carpendale, figs. 1-25.

Claims 25 and 61:

See claim 1. Selker teaches that the size of a menu item (tiles) is changed when the cursor is positioned on or close to the item (abstract; col. 4, lines 7-28).

Claims 26, 62, 121, and 131:

See claim 1. See Selker, col. 5, lines 19-33.

Claims 27, 63, and 99:

See claim 1. See Selker, figures 1-5.

Claims 42, 119, and 129:

See claim 1. Carpendale teaches magnification of icons proximate to the focal object (figs. 1, 2, 3, 5, 11, 12, 15-17).

Claim 43:

Selker teaches user selection of a magnitude of the magnification (col. 6,

lines 40-47, 60-67; col. 7, lines 1-11; col. 9, lines 29-36).

Claim 46:

See Selker, col. 7, lines 4-11; figures 1-5.

Claim 79:

Selker teaches that the size factor can be limited for limiting size expansion

(col. 7, lines 18-25; col. 8, lines 1-10, 55-60).

Claim 98:

See claim 5. See Selker, col. 5, lines 33-55; col. 6, lines 1-17, 40-47; col.

7, lines 27-30, 36-44, 51-57; figs. 2-5.

Claims 120 and 130:

Selker teaches that icons are magnified by a factor that is preferably in some

linear or non-linear inverse proportionate relationship to the proximity of the cursor

(col. 5, lines 46-50).

Claims 122, 132, and 134:

Selker teaches that depending on the enhancement mode, any and all of the

variations of display enhancement may be selectively produced (col. 9, lines 29-

35).

Claims 127 and 135:

See claim 1. See Selker, figs. 1-5.

Claims 128, 138, and 141:

See claims 1, 5, and 26. Selker explains that the system may include

several distance thresholds (col. 5, lines 19-67; col. 6, lines 1-17) and that the

menu item's size is determined in inverse relation to the proximity of the cursor

(col. 4, lines 21-29; col. 8, lines 6-8). Selker also teaches that the size of a menu

item can be expanded to an arbitrary size and the graphic cursor brought to the

selection position (col. 6, lines 40-47); and that the size factor of the menu item

can be limited by the application such as for limiting size expansion to prevent

unintended selection or delimiting size expansion in the case of a requirement for

mandatory input, etc. (col. 8, lines 46-60). Selker explains that differences in d

provide for different degrees of expansion of respective icon; and that depending

on the enhancement mode determined by the operational state of the application,

any and all of the variations of display enhancement may be selectively produced

(col. 9, lines 29-35). Selker teaches that the size of a menu item is expanded in

inverse proportionate relationship to the proximity of the cursor from a default

height (e.g., h) to a fixed maximum level, and the height is maintained at that fixed

level. For example, when distance $= 8$, height $= h + 1$; when distance $= 4$,

height $= h + 2$; when distance $= 2$, height $=$ maximum level, which is maintained.

Claims 137 and 140:

Selker teaches that the object close to the cursor is magnified to a level that is inversely related to its distance from the cursor (figs. 1-3A). Carpendale teaches that all objects close to the cursor are magnified to levels that are inversely related to their distance from the closest item (page 46, col. 2, 2nd paragraph; figs. 1, 5).

4.   **Claims 11, 16, 17, 22, 24, 47, 52, 53, 58-60, 72, 83, 88, 89, 94-97, 108, and 126 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Selker/Carpendale* in view of *Malamud et al* (US 5,825,357).**

Claims 11, 47, and 83:

See claim 1. Selker/Carpendale does not teach that there is a gap between the bar and the bottom of the display. However, Malamud discloses a tool interface, which includes a tray section 12 and an applications section 14. Display mode controls associated with the tray section enable a user to define how, where, and when the tray section and computer resources associated with the tray are displayed. The user may either attach the tray section to any of the four sides of the display screen or display the tray section as a palette (fig. 3). In the palette mode of display for the tray section, both the dimensions and position of the tray section are modifiable by the user (abstract; col. 4, lines 35-48). Therefore, it would have been obvious to an artisan in the art at the time of invention to include

Malamud's palette mode in Selker/Carpendale's invention because the user is enabled to define the bar's position leaving, or not, a space between the bar and the bottom of the display.

Claims 16, 17, 52, 53, 88, and 89:

Selker/Carpendale does not teach that the bar is removed from the display when the cursor moves away from the bar. However, Malamud teaches that in the collapse mode the tray section is collapsed to a width of four pixels, enabling the applications section to occupy substantially the entire screen (col. 5, lines 52-67; col. 6, lines 1-13). Thus, it would have been obvious to a person having ordinary skill in the art at the time of invention to include Malamud's teachings in Selker/Carpendale's invention because the user is enabled to instruct the computer system to hide or minimize the toolbar when needing to occupy the entire screen.

Claims 22, 24, 58, 60, 94, 96, and 97:

See claim 20. Malamud teaches a permanently displayed extended command area 23 of the tray section 12, referred to as an embedded computer resource. The embedded computer resource includes a system icon 28 and a digital clock display 44, but other computer resources can be added to the command area 22 (col. 6, lines 41-60; col. 9, lines 49-61).

Claims 59 and 95:

See claim 22. See Malamud, figure 2.

Claim 72:

See claim 21. Malamud teaches that tiles have a minimum size, which is

changed when the panel exceeds the minimum size requirement (col. 5, lines 12-

22; col. 6, lines 41-60; col. 10, lines 54-60).

Claim 108:

See claim 22. Malamud teaches that the user can control the allocation of

the tiles (col. 7, lines 34-36; col. 10, lines 43-53; col. 11, lines 7-20; col. 13, lines

47-67; col. 14, lines 1-11, 48-53).

Claim 126:

See claim 24. Malamud teaches permanent and nonpermanent objects

embedded in the bar. Malamud teaches icons (outermost ends) 28 and 34, which

are predetermined, and the other icons are user-selectable (col. 6, lines 41-60; fig.

2).

5.   **Claims 18, 19, 54, 55, 90, and 91 are rejected under 35 U.S.C. 103(a) as

being unpatentable over *Selker/Carpendale* in view of *Ludolph et al* (US ,657,049).**

Claims 18, 54, and 90:

Selker/Carpendale does not teach that when the bar is removed it appears to

slide into an edge of the display in response to a keystroke. However, Ludolph

discloses a Desk Drawer, which is closed (removed) when the cursor pointer 50

leaves the drawer region 35. Mouse and/or keyboard commands may be effectuated to close the Desk Drawer (col. 9, lines 31-39; col. 13, lines 16-22). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include Ludolph's teachings in Selker/Carpendale's invention because animation creates the illusion of movement, it adds realism, the drawer not only disappears but the user can actually see it opening and closing.

Claims 19, 55, and 91:

See claim 18. Ludolph teaches that the computer automatically closes (autohide) Desk Drawer when the cursor pointer leaves the drawer region 35 (col. 13, lines 16-22).

6.   **Claims 28, 31, 32, 64, 67, 68, 100, 103, and 104 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Selker/Carpendale* in view of *Mackinlay et al* (US 6,256,649 B1).**

Claims 28, 64, and 100:

Selker/Carpendale does not teach that labels associated with the tiles are displayed with a first predetermined fade-in rate when the cursor moves proximate to a tile from another tile. However, Mackinlay discloses an animated spreadsheet wherein a user can specify the current cell just by moving the mouse cursor on the cell. When the cursor comes in a cell, the data flow graph associated with the cell

gradually appear on the screen (fades in), and it gradually disappears when the

cursor moves away from the cell (fades out), (abstract; col. 3, lines 11-26; col. 7,

lines 32-37; col. 8, lines 21-48). Thus, it would have been obvious to an artisan in

the art at the time the invention was made to include a fade-in and fade-out rate in

Selker/Carpendale's invention because the gradual increase in visibility (fade-in)

allows the icon closest to the cursor to take up most of the user's attention and

the gradual disappearance (fade-out) avoids confusion when making a selection.

Claims 31, 32, 67, 68, 103, and 104:

See claim 28. Mackinlay teaches that when the cursor comes in a cell, the

data flow graph associated with the cell gradually appear on the screen (fades in),

and it gradually disappears when the cursor moves away from the cell (fades out),

(abstract; col. 3, lines 11-26; col. 7, lines 32-37; col. 8, lines 21-48).

Allowable Subject Matter

7.   Claims 109-117 are allowed.

8.   Claims 6-8, 29, 30, 33, 34, 39-41, 65, 66, 69, 70, 75, 77, 78, 101, 102,

105, 106, 124, and 125 are objected to as being dependent upon a rejected base

claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims.

9.   The following is a statement of reasons for the indication of allowable

subject matter:

The prior art of record does not teach or suggest a predefined relationship

between an effect width W, a default height h, and a selected maximum height H

including a function S defined as: $S = ((H - h) \div sine (\pi \times (h \div 2) \div (W \times 2))$, as

recited in claims 6, 39, 75, and 109.

Prior art of record does not teach or suggest a second predetermined fade-in

rate when the cursor moves proximate to a tile from outside a region associated

with the bar, as recited in claims 29, 65, 103, and 112; and a second fade out rate

when the cursor moves out of a region associated with the bar, as recited in claims

33, 69, and 105.

Selker (US Patent 5,736,974) discloses a distance d, which can be

computed from an address within the icon menu 30. The icon menu must be

unaffected for cursor image positions over most of the display area or window.

Some specific or inherent threshold of proximity between the icon menu and cursor

selection position 25 should be provided (col. 5, lines 19-32; col. 6, lines 10-17;

col. 7, lines 35-43; col. 8, lines 37-45). Selker fails to teach that the position of

the tile varies based on a predefined relationship including a function S defined as

$S = ((H - h) \div sine (\pi \times (h \div 2) \div (W \times 2))$.

Mackinlay et al (US Patent 6,256,649 B1) discloses an animated spreadsheet wherein a brief animation is displayed after a user indicates interest in an annotation. When the cursor comes in a cell the data flow graph associated with the cell gradually appears on the screen (fades in), and it gradually disappears when the cursor moves away from the cell (fades out). Mackinlay fails to teach or suggest a second predetermined fade-in rate when the cursor moves proximate to a tile from outside a region associated with the bar, and a second fade out rate when the cursor moves out of a region associated with the bar.

Carpendale discloses distortion-viewing techniques for 3-dimensional data that solves the problem of internal access using a distortion function that creates a clear line of sight to the focus revealing sections previously obscured. The distortion is symmetric about the line of sight and is smoothly integrated back into the original 3D layout. Carpendale teaches that the size of an icon can be changed when the cursor is placed close to it however, Carpendale fails to teach or suggest that the position of the icon changes in accordance with a predefined relationship including a function S defined as $S = ((H - h) \div \sin (\pi \times (h \div 2) \div (W \times 2))$.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See

MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set
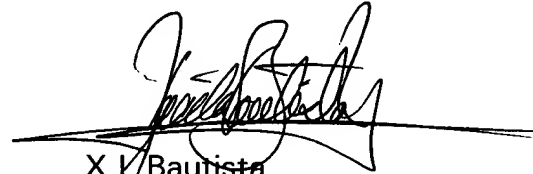
forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire

THREE MONTHS from the mailing date of this action. In the event a first reply is

filed within TWO MONTHS of the mailing date of this final action and the advisory

action is not mailed until after the end of the THREE-MONTH shortened statutory

period, then the shortened statutory period will expire on the date the advisory

action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

calculated from the mailing date of the advisory action. In no event, however, will

the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

11.   Any inquiry concerning this communication or earlier communications from

the examiner should be directed to X L Bautista whose telephone number is (703)

305-3921. The examiner can normally be reached on M-Th (8:00-18:00) Fridays
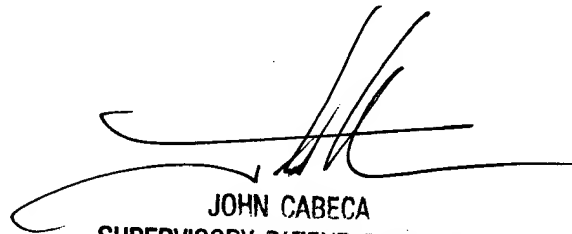
Off.

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, John W Cabeca can be reached on (703) 308-3116. The

fax phone number for the organization where this application or proceeding is

assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

X L/Bautista
Patent Examiner
Art Unit 2173

JOHN CABECA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER

xlb
October 17, 2003